



## A Guide to Assembling Reactor System: Bench Scale

You are a proud owner of an Ace Glass Reactor system - Congratulations!

Lay out all pieces to compare with packing list. Contact Ace Glass immediately if something is missing. For optimum assembly, follow the instructions in this order.

1.	Ensure that the Support Stand is securely level on the countertop.
2.	Slip the Pass-Thru Assembly through the Motor from the bottom and secure with chuck key.
3.	Mount the Motor (with Pass-Thru Assembly) to the top Clamp Holder on the Support Stand.
4.	Secure the Support Shelf/Ring to the bottom Clamp Holder on Stand.
5.	Secure the Swing Latch Clamp/Quick-Release Clamp with extension rod onto the middle Clamp Holder on the Stand.
6.	Place Flask on Support Shelf/Ring on Stand and secure with Swing Latch Clamp or Quick-Release Clamp or Chain Clamp.
7.	Assemble Agitator(s)/Impeller(s) on the Stir Shaft-starting with the bottom Agitator/Impeller. If there is more than one, Bushings should be secured on Impellers in order from bottom to top.
8.	Place the assembled Stir shaft with Agitator(s) into the Flask, gently resting on the bottom.
9.	Place the Head on the Flask with O-ring by gently guiding the Stir Shaft, through the center neck, via the bottom. The larger opening for additions should be in the front.
10.	Use the Flange Clamp to <u>Very Loosely</u> secure the Head to the Flask.
11.	Place assembled Bearing in the center joint of Head through the top of the Stir Shaft. (Do not secure Stir Shaft to Chuck quite yet).
12.	Add Lock Nut (if supplied), then the Gasket on top of the Bearing. [Gasket and Collar are not included with PTFE Vacuum Bearings and Pressure Bearings.]
13.	Place Collar (if supplied) on top of the Gasket. <u>Tighten Collar screws evenly</u> . [The Collar is a safety feature to keep the Stir Shaft from dropping into the flask.] [Gasket and Collar are not included with PTFE Vacuum Bearings and Pressure Bearings.]
14.	Raise the Stir Shaft to completely insert into the Chuck/Flex Coupling (that is already secured to the Motor Chuck –Step #2). Tighten Chuck metal ring when having had inserted the Stir Shaft completely.
15.	Once the Stir Shaft is in place, move the Gasket and Collar (if supplied) so that they sit on the Lock Nut, if they are included with the Bearing.
16.	When the Stir Shaft with Agitator inside of the Reactor are vertically aligned with the Motor, tighten the Flange Clamp/Quickly-Release Clamp.
17.	Before running Motor, ensure that the Stir Shaft with Agitators are not touching or in direct contact within the Flask.
 18.	All Adapters and Peripherals (i.e. Condenser, Funnel, etc) can now be placed in their corresponding port opening, utilizing Offset Adapters where necessary, to avoid direct contact with the Motor and other items. We recommend PTFE Sleeves for joints, or grease.

## **Reactor System:** Bench Scale Pass-Thru Chuck / Flex Coupling Motor & Clamp Holder Collar Lock Nut & Gasket Bearing Stir Shaft **Swing Latch Clamp** Flange / Quick-Release Clamp Flask Support Shelf / Ring Agitators / Impellers **Support Stand**